

TASK - 3

1. Write a Java program to associate the specified value with the specified key in a HashMap.

SOLUTION:

```
import java.util.HashMap;

public class HashMapExample {
    public static void main(String[] args) {
        HashMap<String, Integer> myMap = new HashMap<>();

        myMap.put("Apple", 5);
        myMap.put("Banana", 3);
        myMap.put("Orange", 7);
        {
            System.out.println(myMap);
        }
    }
}
```

OUTPUT:

```
{Apple=5, Orange=7, Banana=3}
```

2. Write a Java program to check whether a HashMap contains key-value mappings (empty) or not.

SOLUTION:

```
import java.util.HashMap;

public class HashMapIsEmpty {
    public static void main(String[] args) {
        HashMap<String, Integer> myMap = new HashMap<>();
        System.out.println("Map is empty: " + myMap.isEmpty());

        myMap.put("Apple", 5);
        myMap.put("Banana", 3);
        System.out.println("Map is empty: " + myMap.isEmpty());

        myMap.clear();
        System.out.println("Map is empty: " + myMap.isEmpty());
    }
}
```

```
}  
}
```

OUTPUT:

Map is empty: true
Map is empty: false
Map is empty: true

3. write a program in Java to create a Map Interface where we can store the cricketer name in it along with his scores and search for the batsman name and display his score.

SOLUTION:

```
import java.util.HashMap;  
import java.util.Scanner;
```

```
public class CricketerScores {
```

```
    public static void main(String[] args) {  
        HashMap<String, Integer> scores = new HashMap<>();  
        Scanner scanner = new Scanner(System.in);  
  
        while (true) {  
            System.out.print("Enter cricketer name (or 'done' to finish): ");  
            String name = scanner.nextLine();  
            if (name.equalsIgnoreCase("done")) {  
                break;  
            }  
            System.out.print("Enter score: ");  
            int score = scanner.nextInt();  
            scores.put(name, score);  
            scanner.nextLine();  
        }  
        System.out.print("Enter batsman name to search: ");  
        String searchName = scanner.nextLine();  
        Integer score = scores.get(searchName);  
  
        if (score != null) {
```

```
        System.out.println(searchName + " scored " + score + "
runs.");
    } else {
        System.out.println("Batsman not found in the list.");
    }
}
}
```

OUTPUT:

Enter cricketer name (or 'done' to finish): dhoni
Enter score: 121
Enter cricketer name (or 'done' to finish): VR
Enter score: 101
Enter cricketer name (or 'done' to finish): done
Enter batsman name to search: VR
VR scored 101 runs.